CLAIMS

What is claimed is:

1. A computer-implemented method for tracking and reporting the status of automated clearing house ("ACH") transactions processed by an ACH operator, comprising the steps of:

receiving an ACH file for ACH processing, the ACH file comprising an ACH batch that comprises an ACH transaction item;

tracking a status of the ACH file during each of a plurality of ACH file processing events, the file processing events comprising at least one of receiving the ACH file, confirming the ACH file, and approving the ACH file and at least one of pending the ACH file, processing the ACH file, processing the ACH batch in the ACH file, and processing the ACH transaction item in the ACH batch; and

presenting the status of the ACH file in response to a query to obtain the status of the ACH file.

2. The computer-implemented method according to Claim 1, wherein said presenting step comprises the steps of:

receiving a query to obtain the status of the ACH file;

retrieving the tracked status of the ACH file in response to receiving the query; and

presenting the tracked status of the ACH file.

3. The computer-implemented method according to Claim 2, wherein the status of the ACH file for a respective one of the ACH file processing events comprises one of file not confirmed; confirmed, awaiting approval; approved; rejected; accepted; pending; ready; and downloaded.

4. The computer-implemented method according to Claim 1, wherein said presenting step comprising presenting a status history of the ACH file indicating a plurality of status changes associated with the ACH file processing events.

5. The computer-implemented method according to Claim 1, wherein said presenting step comprising presenting a current status of the ACH file associated with one the ACH file processing events.

6. The computer-implemented method according to Claim 1, wherein said tracking step comprises recording a date and time of each status change associated with completion of a respective one of the ACH file processing events.

7. The computer-implemented method according to Claim 1, further comprising the step of graphically depicting errors in header information of the ACH file.

8. The computer-implemented method according to Claim 7, wherein said step of graphically depicting errors comprises the steps of:

comparing the header information of the ACH file to required information comprising a plurality of required characters, the header information comprising a plurality of header characters that each correspond to a respective one of the required characters;

determining whether each one of the header characters conforms to the corresponding one of the required characters;

identifying an erroneous portion of the header information in response to a determination that at least one of the header characters does not conform to the corresponding one of the required characters;

presenting an error ruler comprising a continuous string of data locations each corresponding to a respective location and order of the required characters; and

highlighting a portion of the error ruler that corresponds to a location of the erroneous portion of the header information within the required information.

9. The computer-implemented method according to Claim 1, further comprising the steps of:

tracking a status of the ACH batch in the ACH file during each of a plurality of ACH batch processing events; and

presenting the status of the ACH batch in response to a query to obtain the status of the ACH batch.

10. The computer-implemented method according to Claim 9, wherein said presenting step comprises the steps of:

receiving a batch query to obtain the status of the ACH batch;

retrieving the tracked status of the ACH batch in response to receiving the batch query; and

presenting the tracked status of the ACH batch.

11. The computer-implemented method according to Claim 9, wherein the plurality of ACH batch processing events comprises at least one of receiving the ACH file, confirming the ACH file, approving the ACH file, pending the ACH file, processing the ACH file, processing the ACH batch in the ACH file, and processing the ACH transaction item in the ACH batch.

12. The computer-implemented method according to Claim 11, wherein the status of the ACH batch for a respective one of the ACH batch processing events comprises one of rejected, accepted, and pending.

13. The computer-implemented method according to Claim 9, wherein a third party sending point communicates the file received in said receiving an ACH file step on behalf of an originator, and

wherein the originator communicates the query received in said receiving a batch query step.

14. The computer-implemented method according to Claim 9, further comprising the steps of:

determining that a header of the ACH batch comprises an error; and

presenting an error ruler that graphically depicts a location of the error within the ACH batch header.

15. The computer-implemented method according to Claim 1, further comprising the steps of:

tracking a status of the ACH transaction item in the ACH batch during each of a plurality of ACH transaction item processing events;

receiving a query to obtain the status of the ACH transaction item;

retrieving the tracked status of the ACH transaction item; and

presenting the tracked status of the ACH transaction item.

16. The computer-implemented method according to Claim 15, wherein the plurality of ACH transaction item processing events comprises at least one of receiving the ACH file, confirming the ACH file, approving the ACH file, pending the ACH file, processing the ACH file, processing the ACH batch in the ACH file, and processing the ACH transaction item in the ACH batch.

17. The computer-implemented method according to Claim 15, wherein the status of the ACH transaction item for a respective one of the ACH transaction item processing events comprises one of accepted and rejected.

18. The computer-implemented method according to Claim 15, further comprising the steps of:

determining that a detail record of the ACH transaction item comprises an error; and

presenting an error ruler that graphically depicts a location of the error within the ACH transaction item detail record.

19. The computer-implemented method according to Claim 15, further comprising the steps of:

creating an outgoing ACH file comprising the ACH transaction item;

tracking a status of the outgoing ACH file; and

presenting the tracked status of the outgoing ACH file in response to receiving a query to present the tracked status of the outgoing ACH file.

20. A computer-readable medium having computer-executable instructions for performing the computer-implemented method of Claim 1.

21. A computer-implemented method for tracking and reporting the status of automated clearing house ("ACH") transactions processed by an ACH operator, comprising the steps of:

receiving a plurality of ACH files for ACH processing, each of the ACH files comprising at least one ACH batch that that each comprise at least one ACH transaction item;

tracking a current status and a status history of each of the ACH files, ACH batches, and ACH transaction items during a plurality of ACH processing events, the file processing events comprising at least one of receiving each of the ACH files, confirming each of the ACH files, and approving each of the ACH files and at least one of pending each of the ACH files, processing each of the ACH files, processing each of the ACH batches in respective ones of the ACH files, and processing each of the ACH transaction items in respective ones of the ACH batches; and

presenting one of the current status and the status history of one of the ACH files, the ACH batches, and the ACH transaction items.

22. The computer-implemented method according to Claim 21, wherein said presenting step comprises the steps of:

presenting a summary list of the ACH files, ACH batches, and ACH transaction items, the summary list comprising a file link to a list of ACH files, a batch link to a list of ACH batches, and an item link to a list of ACH transaction items;

detecting selection of the file link; and

presenting a list of the ACH files in response to detecting selection of the file link, the list of ACH files comprising the current status of each of the ACH files and a plurality of detailed file links, each of the detailed file links comprising a link to a detailed status of a respective one of the ACH files.

23. The computer-implemented method according to Claim 22, wherein said presenting step further comprises the steps of:

detecting selection of one of the detailed file links; and

presenting the detailed status of the respective one of the ACH files corresponding to the selected detailed file link, the detailed status comprising the current status and the status history of the corresponding one of the ACH files.

24. The computer-implemented method according to Claim 23, wherein the detailed status further comprises a graphical depiction of an error in header information of the corresponding one of the ACH files.

25. The computer-implemented method according to Claim 22, wherein the detailed file links comprise one of an accepted file link and a rejected file link.

26. The computer-implemented method according to Claim 21, wherein said presenting step comprises the steps of:

presenting a summary list of the ACH files, ACH batches, and ACH transaction items, the summary list comprising a file link to a list of ACH files, a batch link to a list of ACH batches, and an item link to a list of ACH transaction items;

detecting selection of the batch link; and

presenting a list of the ACH batches in response to detecting selection of the batch link, the list of the ACH batches comprising the current status of each of the ACH batches and a plurality of detailed batch links, each of the detailed batch links comprising a link to a detailed status of a respective one of the ACH batches.

27. The computer-implemented method according to Claim 26, wherein said presenting step further comprises the steps of:

detecting selection of one of the detailed batch links; and

presenting the detailed status of the respective one of the ACH batches corresponding to the selected detailed batch link, the detailed status comprising the current status and the status history of the corresponding one of the ACH batches.

28. The computer-implemented method according to Claim 27, wherein the detailed status further comprises a graphical depiction of an error in header information of the corresponding one of the ACH batches.

29. The computer-implemented method according to Claim 26, wherein the detailed batch links comprise one of an accepted batch link and a rejected batch link.

30. The computer-implemented method according to Claim 21, wherein said presenting step comprises the steps of:

presenting a summary list of the ACH files, ACH batches, and ACH transaction items, the summary list comprising a file link to a list of ACH files, a batch link to a list of ACH batches, and an item link to a list of ACH transaction items;

detecting selection of the item link; and

presenting a list of the ACH transaction items in response to detecting selection of the item link, the list of ACH transaction items comprising the current status of each of the ACH transaction items and a plurality of detailed item links, each of the detailed item links comprising a link to a detailed status of a respective one of the ACH transaction items.

31. The computer-implemented method according to Claim 30, wherein said presenting step further comprises the steps of:

detecting selection of one of the detailed item links; and

presenting the detailed status of the respective one of the ACH transaction items corresponding to the selected detailed item link, the detailed status comprising the current status and the status history of the corresponding one of the ACH transaction items.

32. The computer-implemented method according to Claim 31, wherein the detailed status further comprises a graphical depiction of an error in header information of the corresponding one of the ACH transaction items.

33. The computer-implemented method according to Claim 30, wherein the detailed item links comprise one of an accepted item link and a rejected item link.

34. A computer-readable medium having computer-executable instructions for performing the computer-implemented method of Claim 21.

35. A system for tracking and reporting the status of automated clearing house ("ACH") transactions processed by an ACH operator, comprising:

an operator server that receives an ACH file from a customer for ACH processing, the ACH file comprising an ACH batch that comprises an ACH transaction item;

a processing module that processes the ACH file, ACH batch, and ACH transaction item for acceptance; and

a file tracking module that tracks a status of the ACH file during a plurality of processing events comprising at least one of receiving the ACH file, confirming the ACH file, and approving the ACH file and at least one of pending the ACH file and processing the ACH file;

wherein said file tracking module communicates the status of the file to the customer in response to a file status request from the customer.

36. The system according to Claim 35, further comprising a record table,

wherein said file tracking module tracks the file status by recording a date and time of each status change associated with completion of a respective one of the ACH file processing events.

37. The system according to Claim 36, wherein said file tracking module receives the file status request from the customer and retrieves the tracked file status from said record table for communication to the customer.

38. The system according to Claim 35, wherein the status of the ACH file for a respective one of the ACH file processing events comprises one of file not confirmed; confirmed, awaiting approval; approved; rejected; accepted; pending; ready; and downloaded.

39. The system according to Claim 35, wherein the status communicated by said file tracking module comprises a status history of the ACH file indicating a plurality of status changes associated with the ACH file processing events.

40. The system according to Claim 35, wherein the status communicated by said file tracking module comprises a current status of the ACH file associated with one of the ACH file processing events.

41. The system according to Claim 35, further comprising an error presentation module that graphically depicts an error in header information of the ACH file.

42. The system according to Claim 41, wherein said error presentation module graphically depicts the file header error by:

comparing the header information of the ACH file to required information comprising a plurality of required characters, the header information comprising a plurality of header characters that each correspond to a respective one of the required characters;

determining whether each one of the header characters conforms to the corresponding one of the required characters;

identifying an erroneous portion of the header information in response to a determination that at least one of the header characters does not conform to the corresponding one of the required characters;

presenting an error ruler comprising a continuous string of data locations each corresponding to a respective location and order of the required characters; and

highlighting a portion of the error ruler that corresponds to a location of the erroneous portion of the header information within the required information.

43. The system according to Claim 35, further comprising a client computer that communicates the file status request from the customer and that receives the file status communicated by said file tracking module for presentation to the customer.

44. The system according to Claim 35, wherein said file tracking module further tracks a status of the ACH batch in the ACH file during each of a plurality of ACH batch processing events and communicates the status of the batch to the customer in response to a batch status request from the customer.

45. The system according to Claim 44, wherein said file tracking module receives the batch status request from the customer and retrieves the tracked batch status for communication to the customer.

46. The system according to Claim 44, wherein the plurality of ACH batch processing events comprises at least one of pending the ACH batch and processing the ACH batch.

47. The system according to Claim 46, wherein the status of the ACH batch for a respective one of the ACH batch processing events comprises one of rejected, accepted, and pending.

48. The system according to Claim 44, further comprising an error presentation module that graphically depicts an error in header information of the ACH batch.

49. The system according to Claim 35, wherein said file tracking module further tracks a status of the ACH transaction item in the ACH batch during an ACH transaction item processing event and communicates the status of the ACH transaction item to the customer in response to an item status request from the customer.

50. The system according to Claim 49, wherein said file tracking module receives the item status request from the customer and retrieves the tracked item status for communication to the customer.

51. The system according to Claim 49, wherein the ACH transaction item processing event comprises processing the ACH transaction item.

52. The system according to Claim 49, wherein the status of the ACH transaction item for the ACH transaction item processing event comprises one of accepted and rejected.

53. The system according to Claim 49, further comprising an error presentation module that graphically depicts an error in a detail record of the ACH transaction item.

54. A computer-implemented method for obtaining the status of automated clearing house ("ACH") transactions processed by an ACH operator, comprising:

communicating an ACH file for ACH processing, the ACH file comprising an ACH batch that comprises an ACH transaction item;

communicating a file status request for the ACH file for one of a plurality of ACH file processing events comprising at least one of receiving the ACH file, confirming the ACH file, and approving the ACH file and at least one of pending the ACH file and processing the ACH file; and

receiving the status of the ACH file in response to the communicated file status request.

55. The computer-implemented method according to Claim 54, wherein the received ACH file status for a respective one of the ACH file processing events comprises one of file not confirmed; confirmed, awaiting approval; approved; rejected; accepted; pending; ready; and downloaded.

56. The computer-implemented method according to Claim 55, wherein the received ACH file status comprises a graphical depiction of an error in header information of the ACH file if the received ACH file status is rejected.

57. The computer-implemented method according to Claim 54, further comprising the steps of:

communicating a batch status request for the ACH batch for one of a plurality of ACH batch processing events comprising at least one of pending the ACH batch and processing the ACH batch; and

receiving the ACH batch status in response to the communicated batch status request.

58. The computer-implemented method according to Claim 57, wherein the received ACH batch status for a respective one of the ACH batch processing events comprises one of rejected, accepted, and pending.

59. The computer-implemented method according to Claim 58, wherein the received ACH batch status comprises a graphical depiction of an error in header information of the ACH batch if the received status is rejected.

60. The computer-implemented method according to Claim 54, further comprising the steps of:

communicating an item status request for the ACH transaction item for an ACH item processing event comprising processing the ACH transaction item; and

receiving the status of the ACH transaction item in response to the communicated item status request.

61. The computer-implemented method according to Claim 60, wherein the received ACH transaction item status for the ACH transaction item processing event comprises one of rejected and accepted.

62. The computer-implemented method according to Claim 61, wherein the received ACH transaction item status comprises a graphical depiction of an error in detail record information of the ACH transaction item if the received status is rejected.

63. A computer-implemented method for tracking and reporting the status of batches of automated clearing house ("ACH") transactions processed by an ACH operator, comprising the steps of:

receiving a plurality of ACH files from at least one sending customer, each of the ACH files comprising at least one ACH batch sent on behalf of an originator, and each ACH batch comprising at least one ACH transaction item;

tracking a status of each of the ACH files, batches, and items during each of a plurality of ACH processing events;

receiving a query from the originator to obtain the status of a tracked ACH batch comprising ACH transaction items for which the originator is responsible;

retrieving the tracked status of the tracked ACH batch in response to the query; and

presenting the tracked status of the tracked ACH batch.

64. The computer-implemented method according to Claim 63, wherein the plurality of ACH processing events comprises at least one of receiving each of the ACH files, confirming each of the ACH files, approving each of the ACH files, processing each of the ACH files, processing each ACH batch in each of the ACH files, and processing each ACH transaction item in each ACH batch.

65. The computer-implemented method according to Claim 64, wherein the status of each of the ACH files, batches, and items for a respective one of the ACH processing events comprises one of file not confirmed; confirmed, awaiting approval; approved; rejected; accepted; pending; ready; and downloaded.

66. The computer-implemented method according to Claim 63, wherein said presenting step comprising presenting a current status of the tracked ACH batch associated with a current one of the ACH processing events.

67. The computer-implemented method according to Claim 63, wherein said presenting step comprises presenting a status history of the tracked ACH batch indicating a plurality of status changes associated with the ACH processing events.

68. The computer-implemented method according to Claim 63, wherein said presenting step comprises the step of graphically depicting errors in header information of the tracked ACH batch.

69. The computer-implemented method according to Claim 68, wherein said step of graphically depicting errors comprises the steps of:

comparing header information from the tracked ACH batch to required information comprising a plurality of required characters, the header information comprising a plurality of header characters that each correspond to a respective one of the required characters;

determining whether each one of the header characters conforms to the corresponding one of the required characters;

identifying an erroneous portion of the header information in response to a determination that at least one of the header characters does not conform to the corresponding one of the required characters;

presenting an error ruler comprising a continuous string of data locations each corresponding to a respective location and order of the required characters; and

highlighting a portion of the error ruler that corresponds to a location of the erroneous portion of the header information within the required information.

70. A computer-readable medium having computer-executable instructions for performing the computer-implemented method of Claim 63.

71. A computer-implemented method for graphically depicting an error in header information of an automated clearing house ("ACH") file, comprising the steps of:

receiving an ACH file for ACH processing, the ACH file comprising an ACH batch that comprises an ACH transaction item;

tracking a status of the ACH file during each of a plurality of ACH file processing events, the file processing events comprising at least one of receiving the ACH file, confirming the ACH file, and approving the ACH file and at least one of pending the ACH file, processing the ACH file, processing the ACH batch in the ACH file, and processing the ACH transaction item in the ACH batch; and

receiving a query to obtain the tracked status of the ACH file;

determining that the tracked status of the ACH file is rejected; and

graphically depicting an error that caused the ACH file to be rejected in response to determining that the tracked status of the file is rejected,

wherein said depicting step comprises:

comparing header information from the ACH file to required information, the required information comprising a plurality of required characters, and the header information comprising a plurality of header characters that each correspond to a respective one of the required characters;

determining whether each one of the header characters conforms to the corresponding one of the required characters;

identifying an erroneous portion of the header information in response to a determination that at least one of the header characters does not conform to the corresponding one of the required characters;

presenting a continuous string of data locations each corresponding to a respective location and order of the required characters; and

highlighting a portion of the continuous string that corresponds to a location of the erroneous portion of the header information within the required information.

72. The computer-implemented method according to Claim 71, further comprising the step of flagging the location of the erroneous portion within the header information,

wherein said highlighting step comprises the steps of:

reading the flagged location;

determining at least one data location on the continuous string that corresponds to the flagged location of the erroneous portion within the header information; and

highlighting the at least one data location on the continuous string that corresponds to the flagged location.

73. The computer-implemented method according to Claim 71, further comprising the steps of:

identifying a correct portion of the header information in response to a determination that at least one of the header characters conforms to the corresponding one of the required characters;

determining at least one data location on the continuous string that corresponds to the location of the correct portion within the header information; and

presenting the correct portion of the header information in the corresponding at least one data location.

74. The computer-implemented method according to Claim 71, further comprising the steps of:

presenting a hyperlink to a graphical depiction of the erroneous portion of the header information; and

detecting selection of the hyperlink,

wherein said presenting and highlighting steps are performed in response to detecting selection of the link.

75. A computer-readable medium having computer-executable instructions for performing the computer-implemented method of Claim 71.

76. A computer-implemented method for graphically depicting an error in header information of an automated clearing house ("ACH") batch, comprising the steps of:

receiving an ACH file for ACH processing, the ACH file comprising an ACH batch that comprises an ACH transaction item;

tracking a status of the ACH batch during each of a plurality of ACH batch processing events, the batch processing events comprising at least one of receiving the ACH file, confirming the ACH file, and approving the ACH file and at least one of pending the ACH file, processing the ACH file, processing the ACH batch in the ACH file, and processing the ACH transaction item in the ACH batch; and

receiving a query to obtain the tracked status of the ACH batch;

determining that the tracked status of the ACH batch is rejected; and

graphically depicting an error that caused the ACH batch to be rejected in response to determining that the tracked status of the batch is rejected,

wherein said depicting step comprises:

comparing header information from the ACH batch to required information, the required information comprising a plurality of required characters, and the header information comprising a plurality of header characters that each correspond to a respective one of the required characters;

determining whether each one of the header characters conforms to the corresponding one of the required characters;

identifying an erroneous portion of the header information in response to a determination that at least one of the header characters does not conform to the corresponding one of the required characters;

presenting a continuous string of data locations each corresponding to a respective location and order of the required characters; and

highlighting a portion of the continuous string that corresponds to a location of the erroneous portion of the header information within the required information.

77. The computer-implemented method according to Claim 76, further comprising the step of flagging the location of the erroneous portion within the header information,

wherein said highlighting step comprises the steps of:

reading the flagged location;

determining at least one data location on the continuous string that corresponds to the flagged location of the erroneous portion within the header information; and

highlighting the at least one data location on the continuous string that corresponds to the flagged location.

78. The computer-implemented method according to Claim 76, further comprising the steps of:

identifying a correct portion of the header information in response to a determination that at least one of the header characters conforms to the corresponding one of the required characters;

determining at least one data location on the continuous string that corresponds to the location of the correct portion within the header information; and

presenting the correct portion of the header information in the corresponding at least one data location.

79. The computer-implemented method according to Claim 76, further comprising the steps of:

presenting a hyperlink to a graphical depiction of the erroneous portion of the header information; and

detecting selection of the hyperlink,

wherein said presenting and highlighting steps are performed in response to detecting selection of the link.

80. A computer-readable medium having computer-executable instructions for performing the computer-implemented method of Claim 76.

81. A computer-implemented method for graphically depicting an error in detail record information of an automated clearing house ("ACH") item, comprising the steps of:

receiving an ACH file for ACH processing, the ACH file comprising an ACH batch that comprises an ACH transaction item;

tracking a status of the ACH item during each of a plurality of ACH processing events, the item processing events comprising at least one of receiving the ACH file, confirming the ACH file, and approving the ACH file and at least one of pending the ACH file, processing the ACH file, processing the ACH batch in the ACH file, and processing the ACH transaction item in the ACH batch; and

receiving a query to obtain the tracked status of the ACH item;

determining that the tracked status of the ACH item is rejected; and

graphically depicting an error that caused the ACH item to be rejected in response to determining that the tracked status of the item is rejected,

wherein said depicting step comprises:

comparing detail record information from the ACH item to required information, the required information comprising a plurality of required characters, and the detail record information comprising a plurality of detail record characters that each correspond to a respective one of the required characters;

determining whether each one of the detail record characters conforms to the corresponding one of the required characters;

identifying an erroneous portion of the detail record information in response to a determination that at least one of the detail record characters does not conform to the corresponding one of the required characters;

presenting a continuous string of data locations each corresponding to a respective location and order of the required characters; and

highlighting a portion of the continuous string that corresponds to a location of the erroneous portion of the detail record information within the required information.

82. The computer-implemented method according to Claim 81, further comprising the step of flagging the location of the erroneous portion within the detail record information,

wherein said highlighting step comprises the steps of:

reading the flagged location;

determining at least one data location on the continuous string that corresponds to the flagged location of the erroneous portion within the detail record information; and

highlighting the at least one data location on the continuous string that corresponds to the flagged location.

83. The computer-implemented method according to Claim 81, further comprising the steps of:

identifying a correct portion of the detail record information in response to a determination that at least one of the detail record characters conforms to the corresponding one of the required characters;

determining at least one data location on the continuous string that corresponds to the location of the correct portion within the detail record information; and

presenting the correct portion of the detail record information in the corresponding at least one data location.

84. The computer-implemented method according to Claim 81, further comprising the steps of:

presenting a hyperlink to a graphical depiction of the erroneous portion of the detail record information; and

detecting selection of the hyperlink,

wherein said presenting and highlighting steps are performed in response to detecting selection of the link.

85. A computer-readable medium having computer-executable instructions for performing the computer-implemented method of Claim 81.